

SECTION 1: IDENTIFICATION

MSDS ID: MSDSP353

PRODUCT NAME: PRESTONE DEICER WASHER FLUID
AS250 Formula: 2024-138, 2033-69

MANUFACTURER: Prestone Products Corporation
39 Old Ridgebury Road
Danbury, CT 06810-5109

INFORMATION PHONE NUMBER: (203) 830-7800

EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300
483-7161 in the District of Columbia

DATE OF MSDS PREPARATION/REVISION: 6/10/96

SECTION 2: PRODUCT COMPONENTS

HAZARDOUS COMPONENTS	CAS#	PERCENT	EXPOSURE LIMITS
Methyl Alcohol (Methanol)	67-56-1	30-40	200 ppm TWA OSHA PEL 200 ppm TWA ACGIH TLV skin 250 ppm STEL ACGIH TLV
Ethylene Glycol (aerosol)	107-21-1	1-10	None Established-OSHA PEL 100 mg/m3 Ceiling ACGIH TLV

NON-HAZARDOUS INGREDIENTS >1%
Water 7732-18-5 50-70%

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable Liquid! Eye irritant. Inhalation may cause headache, dizziness, drowsiness, nausea, visual impairment, narcosis and unconsciousness. Poisonous if swallowed.

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS: No acute toxic effects expected when product is used as directed.

INHALATION: Inhalation of high concentrations, particularly mists, may cause irritation of the nose and throat with headache, dizziness, drowsiness and disturbance of vision.

SKIN CONTACT: Prolonged contact with the skin to methanol may cause reddening and defatting of the skin. Methanol may be absorbed through the skin possibly resulting in harmful effects.

EYE CONTACT: May be irritating and cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or feeling like that of fine dust in the eyes.

INGESTION: May cause nausea, abdominal pain, vomiting, shortness of breath, fatigue and leg cramps. Nervous system effects include: headache, confusion, drunken behavior, central nervous system depression, coma and death. Visual effects from methanol include blurred vision, double vision, changes in color perception, restriction of visual fields and complete blindness. With massive overdose, liver, kidney and heart muscle injury have been described.

There may be a delay of several hours between swallowing methanol and the onset of symptoms. Severe kidney damage follows the ingestion of large volumes of ethylene glycol.

CHRONIC HAZARDS: Long term repeated overexposure to methanol vapor concentrations of 3000 ppm or greater may allow a cumulative effect to occur with resulting nausea, vomiting, headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, and clouded and double vision. Prolonged overexposure at levels of 800 to 1000 ppm may result in severe eye damage in some persons. The components of this product are not suspected carcinogens.

OTHER EFFECTS OF OVEREXPOSURE: None currently known.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARDS: Animal studies suggest that ethylene glycol at high doses can produce birth defects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Due to its defatting properties, methanol may aggravate an existing skin condition.

SECTION 4: FIRST AID MEASURES

INHALATION: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen if available. Administer artificial respiration if breathing stops. Seek immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush exposed skin with copious amounts of water and wash with soap. If irritation develops and persists, seek medical attention.

EYE CONTACT: Exposed eyes should be immediately flushed with a steady stream of water. If contact lenses are present they should be removed while flushing. Flush for a minimum of 15 minutes or until irritation subsides. If irritation, pain, swelling, or tearing persists, seek immediate medical attention.

INGESTION: Give one or two glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a physician, poison control center or emergency room for assistance and instructions on inducing vomiting and other emergency first aid treatment.

NOTES TO PHYSICIAN: The combination of visual disturbance, metabolic acidosis and formic acid in the urine is evidence of methanol poisoning. The principal toxic effects of ethylene glycol when ingested, are kidney damage and metabolic acidosis. Ethanol is antidotal, and its early administration may block the formation of toxic metabolites of both methanol and ethylene glycol. Hemodialysis is highly effective at removing methanol, ethylene glycol and their metabolites, and may be indicated depending upon the clinical situation and blood levels.

SECTION 5: FIRE AND EXPLOSION DATA

FLASH POINT: 90 F (32 C) Setaflash; 114 F (45.5 C) TOC

AUTOIGNITION TEMPERATURE: Not Determined

FLAMMABILITY LIMITS:

LEL: 3.2 (ethylene glycol) UEL: 36% (Methanol)

EXTINGUISHING MEDIA: Use water fog, carbon dioxide, alcohol

foam or dry chemical. Cool fire exposed containers with water.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

UNUSUAL FIRE HAZARDS: Flammable liquid. Methanol-water mixtures will burn unless very dilute. Flame is invisible in daylight. Vapors are heavier than air and may flow along surfaces to distant ignition sources and flash back.

HAZARDOUS COMBUSTION PRODUCTS: Burning may produce carbon monoxide and carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment (See Section 8). Collect with absorbent material and place in appropriate, labeled container for disposal.

SECTION 7: HANDLING AND STORAGE

DANGER: Harmful or Fatal if Swallowed

Do not swallow

Avoid eye and skin contact.

Avoid breathing vapors or mists.

Use only with adequate ventilation.

Wash exposed skin thoroughly with soap and water after use.

Flammable Liquid!

Keep container away from heat, sparks, open flames and all other sources of ignition.

Do not smoke during use.

Store product below 120 F and away from direct sunlight.

Store in a cool, well ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

RESPIRATORY PROTECTION: The following respirators are recommended on information found in the physical and chemical properties, toxicological information and health hazards section. They are ranked in order from minimum to maximum respiratory protection. The specific respirator must be based on contamination levels found in the work place, must be based on the specific operation, must not exceed the working limits of the respirator and must be jointly approved by the National Institute for Occupational Safety and Health and the Mine and Safety and Health Administration (NIOSH-MSHA).

A supplied air respirator with a full facepiece operated in continuous flow mode. Positive pressure self-contained breathing apparatus. Organic vapor cartridge respirators are not recommended for methanol vapor exposures.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS INCLUDING ALL SITUATIONS OF UNKNOWN CONTAMINANT CONCENTRATIONS: Any self-contained breathing apparatus that has a full facepiece and is operated in pressure-demand or other positive

pressure mode.

GLOVES: Chemical resistant gloves such as butyl rubber or Viton where contact is possible.

EYE PROTECTION: Splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear yellow liquid with slight alcohol odor. The reported mean odor threshold for methanol is 160 - 690 ppm.

pH: 7.9	SPECIFIC GRAVITY: 7.9 lbs/gal
BOILING POINT (F): 158 F	VAPOR PRESSURE: 36 mm Hg @ 68 F
MELTING POINT (F): -32 F	VAPOR DENSITY: >1
SOLUBILITY IN WATER: 100%	EVAPORATION RATE: <1 (Butyl Acetate=1)
PERCENT VOLATILE: >95%	VISCOSITY: ~1 cst

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Heat, sparks, flames and all other sources of ignition.

INCOMPATIBILITY: Strong bases, strong acids, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Methanol: LD50 Oral Rat: 9100 mg/kg
LD50 Skin Rabbit: 15,940 mg/kg
LC50 Inhalation Rat: 145,000 ppm/1hr

Ethylene Glycol: LD50 Oral Rat: 4700 mg/kg
LD50 Skin Rabbit: 9530 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Methanol: TLM 96: >1000 ppm

SECTION 13: DISPOSAL INFORMATION

Dispose of product as hazardous waste (ignitable) in accordance with all local, state/provincial and federal regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION

PROPER SHIPPING NAME: Consumer Commodity

TECHNICAL NAME: None

UN NUMBER: None

HAZARD CLASS/PACKING GROUP: ORM-D

LABELS REQUIRED: None

DOT MARINE POLLUTANTS: This product does not contain Marine

Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION

DESCRIPTION: Flammable Liquid, Toxic, N.O.S. (Methanol), 3.3, UN1992,
PGIII, (6.1), FP 32C, IMDG Page 3346-1

ID NUMBER: UN1992

HAZARD CLASS: 3.3 (6.1)

PACKING GROUP: III

LABELS REQUIRED: Flammable Liquid/Toxic

PLACARDS REQUIRED: Flammable Liquid/Toxic

SECTION 15: REGULATORY INFORMATION

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health, fire hazard

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title 111, Section 313 (40 CFR 372):

Methanol	67-56-1	40% maximum
Ethylene Glycol	107-21-1	10% maximum

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Methanol (40% maximum) of 5,000 lbs, is 12,500 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65 - This product does not contain chemicals regulated under California Proposition 65.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision B - (A toxic material causing other chronic effects), Class B - Division 2 (Flammable Liquid)

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (MITI) List.

SECTION 16: OTHER INFORMATION

NFPA RATING (NFPA 704) - FIRE: 3
HEALTH: 2
REACTIVITY: 0

This MSDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.



PRESTONE DEICER WASHER FLUID

MSDSP353

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:

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